

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY



## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

KIM, Sun-young

Korea Coal Center, 10th Floor, 80-6, Susong-Dong, Chongro-Ku, Seoul, 110-727 Republic of Korea

Date of mailing  
(day/month/year) **30 JUNE 2005 (30.06.2005)**

Applicant's or agent's file reference

OF04P138

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/KR2005/000217**

International filing date (day/month/year)

**26 JANUARY 2005 (26.01.2005)**

Priority date (day/month/year)

**09 JULY 2004 (09.07.2004)**

International Patent Classification (IPC) or both national classification and IPC

**IPC7 B65D 65/46**

Applicant

**YOUL CHON CHEMICAL CO., LTD et al**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

CHOI, Ki Hyuk

Telephone No. 82-42-481-5894



WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/KR2005/000217

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2005/000217

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

<b>Novelty (N)</b>	Claims	1 - 31	YES
	Claims	NONE	NO
<b>Inventive step (IS)</b>	Claims	1 - 31	YES
	Claims	NONE	NO
<b>Industrial applicability (IA)</b>	Claims	1 - 31	YES
	Claims	NONE	NO

**2. Citations and explanations :**

The following documents identified in the International Search Report have been considered for the purpose of this written opinion:

D1: KR 2004-0053644 A

D2: JP 2001-0103845 A

D3: KR 20-0366379 Y

**1. Novelty and Inventive Step**

The invention of claim 1 is a biodegradable starch container comprising 20-60 wt.% of invariable starch, 5-30 wt.% of pulp fiber powder, 30-60 wt.% of solvent, 0.1-0.2 wt.% of optical catalyzer, 0.01-1 wt.% of preservatives, 0.5-5 wt.% of mold release agent, and the biodegradable film therein.

D1 discloses a biodegradable container comprising 25-65 wt.% of invariable starch, 30-70 wt.% of water, 0.1-10 wt.% of optical catalyzer, 0.001-20 wt.% of preservatives, 1-25 wt.% of fiber, and 0.01-5 wt.% of mold release agent. However, D1 does not disclose a biodegradable film therein.

D2 discloses a biodegradable foaming material including a cellulose and titanium dioxide equivalent to the pulp fiber and optical catalyzer of claim 1. However, D2 does not disclose starch which is a principle material of a biodegradable container.

D1 and D2 do not suggest all the components of claim 1 and the combination of said components is not obvious to the person skilled in the art.

(Continued in Supplemental Box.)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/KR2005/000217

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

BOX V.

Claims 2 to 15 are dependent on claim 1, and claims 16 to 31 relate to a manufacturing method of a biodegradable starch container which has the same components as the container of claim 1.

Therefore, claims 1 to 31 satisfy the requirement of PCT Article 33(2) and 33(3) in respect of novelty and inventive step.

**2. Industrial Applicability**

Claims 1 to 31 relate to a biodegradable starch container and a manufacturing method thereof providing sterilizing power and deodorizing power. Therefore, claims 1 to 31 possess industrial applicability according to PCT Article 33(4).